

WHAT IS CLAIMED IS:

1. A main switch conveying apparatus for a vacuum circuit breaker installed in a cage having electrical load and source terminals, the main switch conveying apparatus comprising:
  - 5 a carriage for conveying the main switch loaded on the carriage in such a manner that the main switch is coupled to or separated from the terminals;
  - a carriage actuating assembly including a lead screw for providing a driving force to move the carriage and provided with braking recesses at the predetermined positions on the lead screw in such a manner that the carriage is stopped at a test position, a safety position and a run position of
  - 10 the main switch, and a conveying nut fixed on the carriage to mesh with the lead screw and movable together with the carriage relatively to the lead screw;
  - a girder assembly detachably supported on both front sidewalls of the cage for supporting one end of the lead screw to rotate;
  - a brake assembly installed on the carriage for stopping the carriage by locking the lead
  - 15 screw at positions of the braking recesses; and
  - a brake releasing assembly for releasing the locking of the brake assembly to allow the carriage to move again.
2. The main switch conveying apparatus as claimed in claim 1, wherein the brake
- 20 assembly comprises;
  - a stopper movable to a locking position of the lead screw and releasing position of the lead screw;
  - a first guide bracket fixed on a bottom surface of the carriage for guiding a leading end of the stopper opposing the lead screw;
  - 25 a second guide bracket fixed on a bottom surface of the carriage for guiding a rear portion

of the stopper;

a spring for elastically biasing the stopper to contact with the lead screw; and

a latch rotatable to a latching position of the stopper and a releasing position of the stopper.

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3. The main switch moving apparatus as claimed in claim 2 further comprising a toggle spring assembly for biasing the latch to the latching position.

4. The main switch conveying apparatus as claimed in claim 3, wherein the toggle spring  
10 assembly comprises;

a supporting bracket for supporting the latch rotatably;

a swing link connected to the latch by a pin for swinging

in accordance with rotating of the latch; and

a spring having one end fixed on the pin and the other end fixed on the supporting bracket  
15 for biasing the latch to position of the latching position.

5. The main switch conveying apparatus as claimed in claim 3, further comprising a lock assembly lockable the latching position of the latch.

20 6. The main switch conveying apparatus as claimed in claim 5, wherein the lock assembly comprises;

a lock for locking the latching position of the latch; and

a vertically movable member connected to the lock for actuating the lock.

25 7. The main switch conveying apparatus as claimed in claim 6, wherein the lock assembly

comprises;

the lock rotatable to a locking position of the latching of the latch or unlocking position of the latching of the latch;

the vertically movable member connected to one end of the lock for actuating the lock to  
5 the locking position or the unlocking position;

a supporter for supporting the lock rotatably;

a bracket for supporting the vertically movable member; and

a spring for biasing the vertically movable member to make the lock to be unlocked.

10 8. The main switch conveying apparatus as claimed in claim 1 and claim 2, wherein the brake releasing assembly comprises;

a latch actuating shaft connected to the latch for transferring rotational force to the latch;

and

a lever connected to one end of the latch actuating shaft for actuating the shaft  
15 manually.